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EXAMINER

PESIN, BORIS M

ART UNIT PAPER NUMBER

2174

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,202

Applicant(s)

BARG ET AL.

Examiner

Boris Pesin

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,13-19,21-23,25,31-37,39,40,48,52,54,56-58,69,71-79,81,82,91,97,99,100,131 and 162 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,13-19,21-23,25,31-37,39,40,48,52,54,56-58,69,71-79,81,82,91,97,99,100,131 and 162 is/are rejected.
- 7) ☒ Claim(s) 48,71,72,74 and 91 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ ✓
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14, 16-19, 31-37, 39, 40, 52, 69, 71-73, 75-78, 82, 97, and 99 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The applicant refers to a single dimensional view throughout the claims. A single dimension view is a line; the examiner believes that it was not the applicant's motive to display a line, but a two dimensional graph. However this is not specified.

Claim Objections

Claims 40 and 91 are objected to because of the following informalities: Claim must end in a period, not a semicolon.

Appropriate correction is required.

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Claims 71 and 72 are rejected because they depend on claim 70, which has been canceled. Because these claims are improper, they will not be treated on their merits.

Due to the 112 1st paragraph rejections in the claims, the examiner will interpret the claims to the best of his abilities and use the broadest possible definitions when one is not provided by the applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 3, 5, 6, 13, 21, 22, 23, 25, 56, 57, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rebane (US 6662192) in view of Rowe et al. (US 5781758).

In regards to claim 1, Rebane teaches a conditioned data visualizing system usable to view conditioned data having a plurality of dimensions and a plurality of measures (i.e. "method for data collection, evaluation, information generation and/or presentation. More, particularly the present invention relates to a system for collecting, evaluating, generating, and presenting data and/or information relating to electronic commerce. The system and methods of the present invention include a module for stabilizing small or noisy samples of data, including the prediction of missing observations." Abstract, Line 1). Rebane does not teach a workflow control having a plurality of workflow control entries, each workflow control entry associated with a predetermined set of at least one dimension of the plurality of dimensions of the conditioned data and at least one measure of the plurality of measures of the conditioned data; and a display manager capable of displaying, on a display device, a plurality of data visualization views and the workflow control; wherein, when a workflow control entry is selected for viewing, the display manager accesses a portion of the conditioned data based on the predetermined set of the at least one dimension of the plurality of dimensions of the conditioned data and the at least one measure of the plurality of measures of the conditioned data associated with the selected workflow control entry and generates and displays at least one of the plurality of data visualization views, each displayed data visualization view generated based on at least a subset of the accessed portion of the conditioned data. Rowe teaches, "different chapter headings can be displayed as labels in bookmark 45 so that when the user selects a chapter, the first page of that chapter is displayed in view window 39."

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(Column 8, Line 56). A bookmark in Rowe's invention is a menuing system (i.e. workflow control) in where data can be organized. In summary, Rebane teaches a system for collecting and evaluating information (data), he further teaches a system for presentation of the data (Figure 5a- Figure 5c). Rowe teaches a menuing system (or a workflow control) that displays data based on what menu item was selected. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane with the teachings of Rowe and include a system comprising a workflow control having a plurality of workflow control entries, a display manager capable of displaying a plurality of data visualization views and the workflow control and when the workflow control entry is selected displaying the appropriate data with the motivation to provide for an easy way of organizing and displaying data.

In regards to claim 2, Rebane and Rowe teach all the limitations of claim 1. Rebane does not teach a visualization system wherein: the workflow control further comprises a plurality of workflow control class entries; and for each of at least some of the workflow control class entries, at least some of the workflow control entries are associated with that workflow control class entry. Rowe teaches that the workflow control further comprises a plurality of workflow control class entries (Figure 2a, Element 45). He further teaches that for each of at least some of the workflow control class entries, at least some of the workflow control entries are associated with that workflow control class entry (Figure 2a, Element 45). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane with the

teachings of Rowe and include a system comprising a plurality of workflow control entries with the motivation to have a better method of organizing the data.

In regards to claim 3, Rebane and Rowe teach all the limitations of claim 1. Rebane does not teach a visualization system wherein each of the workflow control class entries can be selectively opened or closed, such that, when a workflow control class entry is opened, the display manager displays any workflow control entries associated with that workflow control class entry in the workflow control, and when that workflow control class entry is closed, the display manager removes the workflow control entries associated with that workflow control class entry from a display of the workflow control. Rowe teaches a system wherein each of the workflow control class entries can be selectively opened or closed (Figure 2a, Element 45, the user can open and view as well as close sub-categories under each category).

In regards to claim 5, Rebane and Rowe teach all the limitations of claim 2. Rebane does not teach a visualization system wherein each workflow control class entry has a selection icon associated with that workflow control class entry, and when the selection icon associated with a particular workflow control class entry is selected, the display manager toggles that workflow control class entry between being open and being closed. Rowe teaches system wherein each workflow control class entry has a selection icon associated with that workflow control class entry, and when the selection icon associated with a particular workflow control class entry is selected, the display manager toggles that workflow control class entry between being open and being

closed (Figure 2a, Element 45, the user can open and view as well as close sub-categories under each category).

In regards to claim 6, Rebane and Rowe teach all the limitations on claim 2. Rebate further teaches an associating properties table having a plurality of entries (i.e. Figure 5A). He does not teach a visualization system where those entries are associated with one of the plurality of workflow control entries and containing data identifying the predetermined set of at least one dimension of the plurality of dimensions of the conditioned data and at least one measure of the plurality of measures of the conditioned data for that one of the plurality of workflow control entries and data identifying the workflow control class entry to which that one of the plurality of workflow control entries is associated. Rowe teaches, "A page offset table is also provided in the optimized document file that includes page offset information used to locate individual pages of the document." Column 3, Line 31). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane with the teachings of Rowe and include a table associated with a workflow control with the motivation to provide for quick access to the data.

In regards to claim 13, Rebane and Rowe teach all the limitations of claim 1. Rebate further teaches an associating properties table having a plurality of entries (i.e. Figure 5A). He does not teach a system wherein those entries are associated with one of the plurality of workflow control entries and containing data identifying the predetermined set of at least one dimension of the plurality of dimensions of the conditioned data and at least one measure of the plurality of measures of the

conditioned data for that one of the plurality of workflow control entries. Rowe teaches, "A page offset table is also provided in the optimized document file that includes page offset information used to locate individual pages of the document." Column 3, Line 31).

In regards to claim 21, Rebane teaches a data visualization portion comprising a plurality of data visualization views, each data visualization view usable to visualize at least one dimension and at least one measure (Figure 6a and 6b). He does not teach a workflow control portion comprising a plurality of selectable workflow control entries, each workflow control entry associated with a predetermined set of at least one dimension of the plurality of dimensions of the conditioned data and at least one measure of the plurality of measures of the conditioned data and; wherein, when a workflow control entry is selected, the plurality of data visualization views are automatically populated with portions of the conditioned data selected based on the predetermined set of at least one dimension and at least one measure associated with the selected workflow control entry. Rowe teaches, a workflow control portion [a menu system] comprising a plurality of selectable workflow control entries, each workflow control entry associated with a predetermined set of at least one dimension of the plurality of dimensions of the conditioned data and at least one measure of the plurality of measures of the conditioned data and; wherein, when a workflow control entry is selected, the plurality of data visualization views are automatically populated with portions of the conditioned data selected based on the predetermined set of at least one dimension and at least one measure associated with the selected workflow control entry. (i.e. "different chapter headings can be displayed as labels in bookmark 45 so

that when the user selects a chapter, the first page of that chapter is displayed in view window 39." (Column 8, Line 56)). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane with the teachings of Rowe and include a system wherein when the menu item is pressed, the appropriate data is displayed in the appropriate window with the motivation to provide for quick access to the data in the menu.

Claim 22 is in the same context as claim 2; therefore it is rejected under similar rationale.

Claim 23 is in the same context as claim 3; therefore it is rejected under similar rationale.

Claim 25 is in the same context as claim 5; therefore it is rejected under similar rationale.

In regards to claim 56, Rebane teaches inputting a set of conditioned data having a plurality of dimensions and a plurality of measures. (i.e. "FIG. 15 shows a flow chart for an activity module process 23 that receives data input from a data source, such as database 20." Column 30, Line 43). Rebane does not teach displaying a workflow control view comprising a plurality of selectable workflow control entries; associating, for each workflow control entry, that workflow control entry with a predetermined set comprising at least one dimension of the plurality of dimensions of the conditioned data and at least one measure of the plurality of measures of the conditioned data; receiving an input selecting one of the selectable workflow control entries; selecting a portion of the conditioned data based on the predetermined set associated with the selected

workflow entry; and generating and displaying at least one of a plurality of data visualization views based on the selected portion of the conditioned data. Rowe teaches, "different chapter headings can be displayed as labels in bookmark 45 so that when the user selects a chapter, the first page of that chapter is displayed in view window 39." (Column 8, Line 56). A bookmark in Rowe's invention is a menuing system (i.e. workflow control) in where data can be organized. Rowe further teaches, "The computer determines the font, size, color, or other appropriate information for each object to be displayed by examining the associated font objects, color maps, size, and other information in the PDF document." Column 9, Line 21). He further teaches, "Icons 50 allow random access to any of the pages of the document, i.e., a user may select an icon 50 to display the corresponding page 40 in view window 39." Column 9, Line 32). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane with the teachings of Rowe and include a menuing system and link it to a set of data and generate displays of the data based on what the user pressed with the motivation to provide for easy navigation of the data.

Claim 57 is in the same context as claim 2; therefore it is rejected under similar rationale.

Claim 58 is in the same context as claim 5; therefore it is rejected under similar rationale.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rebane (US 6662192) in view of Rowe et al. (US 5781758) in further view Perry.

In regards to claim 7, Rebane and Rowe teach all the limitations of claim 6. They do not teach a visualizing system comprising means for creating a new entry in the association properties table, for creating a new workflow control entry that is associated with the new entry in the association properties table and with a predetermined one of the plurality of workflow control class entries, and for adding data to the new entry identifying a new predetermined set of at least one dimension of the plurality of dimensions of the conditioned data and at least one measure of the plurality of measures of the conditioned data based on the dimensions and measures of the conditioned data currently displayed on the display by the display manager. Perry teaches, "First, click the Bookmarks and Page button, or choose View > Bookmarks and Page. If the document already contains bookmarks, click the bookmark beneath which you want to place a new bookmark. If you don't select a bookmark, the new bookmark is placed at the end of the bookmark list.", Page 1, and "Follow this step to create a bookmark that will link to outside of the current document; the Web, other PDFs and movies. First, create a new bookmark following the previous step, or use the shortcut Command/Ctrl+B. Next, select the page icon next to the bookmark to highlight it, choose Edit > Properties. You can then choose the action from the pop-up menu.", Page 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe with the teachings of Perry and include a system for creating

a new entry in the workflow control and adding data to the new entry with the motivation to have an easy system of adding data to the menuing system.

Claims 14, 15, 19, 31, 36, 37, 40, 52, 54, 69, 79, 81, 82, 97, 99, and 162 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rebane (US 6662192) in view of Rowe et al. (US 5781758) in further view Barg et al (US 6707454).

In regards to claim 14, Rebane and Rowe teach all the limitations of claim 1. They don't teach a conditioned data visualizing system wherein the display manager generates, as the plurality of data visualization views, at least two single dimensional views and at least one multiple dimensional view based on the predetermined set of at least one dimension and at least one measure associated with the selected workflow control entry. Barg teaches a data visualization system wherein the display manager generates, as the plurality of data visualization views, at least two single dimensional views and at least one multiple dimensional view based on the predetermined set of at least one dimension and at least one measure associated with the selected workflow control entry (Figure 10, there are several graphs that are single dimensional and an example of a multidimensional graph). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe with the teachings of Barg and include single and multiple dimensional graphs with the motivation to provide for a better display of the data.

In regards to claim 15, Rebane, Rowe, and Barg teach all the limitations of claim 14. Rebane further teaches a multidimensional view comprising of a textual data view (Figure 6a). Rebane and Rowe do not teach a conditioned data visualizing system wherein the at least one multiple dimensional view comprises at least one of a multiscape view and a multiple dimensions view. Barg teaches "In the exemplary embodiment of the single measure perspective, which uses a three-dimensional multiscape view, the dimensions of the cube, or pivot table, are used as the X and Y axes for the three-dimensional multiscape view." (Column 6, Line 28).

In regards to claim 19, Rebane, Rowe, and Barg teach all the limitations of claim 14. Rebane and Rowe do not teach a conditioned data visualizing system wherein the display manager associates colors to values of the data visualized in the at least two single dimensional views and the at least one multiple dimensional views based on a selected one of the at least one dimension of the predetermined set of at least one dimension and at least one measure. Barg teaches, "In the second exemplary embodiment of the multiple measures perspective shown in FIG. 4, data in the bar charts of the dimensional view portion and the corresponding points in the scatterplot view are colored using the same color." Column 11, Line 40). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe with the teachings of Barg and associate colors with values with the motivation to provide for an easy way to identify the data.

In regards to claim 31, Rebane and Rowe teach all the limitations of claim 21. They do not teach a graphical user interface, wherein the data visualization portion

comprises, as the plurality of data visualization views, at least two single dimensional views and at least one multiple dimensional view. Barg teaches teach a graphical user interface, wherein the data visualization portion comprises, as the plurality of data visualization views, at least two single dimensional views and at least one multiple dimensional view (Figure 10, there are several graphs that are two dimensional and an example of a multidimensional graph). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe with the teachings of Barg and include single and multiple dimensional graphs with the motivation to provide for a better display of the data.

In regards to claim 36, Rebane, Rowe and Barg teach all the limitations of claim 31. Rebane and Rowe do not teach a graphical user interface further comprising a color-by list box, the color-by list box comprising the at least one dimension associated with the selected workflow control entry, wherein colors are associated to values of the data visualized in the at least two single dimensional views and the at least one multiple dimensional views based on a selected one of the at least one dimension of the color-by list box. Barg teaches, "Arranged across the top of the exemplary embodiment of the toolbar 130 shown in FIG. 7 are a displayed perspective drop-down menu 601, a color-by drop-down menu 602 and a displayed measure drop-down menu 603." Column 13, Line 45). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe with the teachings of Barg and include a list box with color-by entries with the motivation to provide for easier visualization of data.

In regard to claim 37 is in the same context at 15; therefore it is rejected under similar rationale.

In regards to claim 40, Rebane, Rowe and Barg teach all the limitations of claim 37. Rebane and Rowe do not teach a graphical user interface wherein: the multiscape view comprises a three-dimensional landscape view; a first axis of the three-dimensional landscape view is associated with the dimension currently displayed in a first one of the single dimensional views; a second axis of the three-dimensional landscape view is associated with the dimension currently displayed in a second one of the single dimensional views; and a third axis of the three-dimensional landscape view is associated with the measure currently displayed in the at least two single dimensional views (Figure 2, there are several graphs that have single dimensional views, and a 3-d graph whose axes comprise from the single dimensional graphs). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe with the teachings of Barg and include a GUI that comprises a three dimensional graph wherein the first and second axis of the three dimensional graph comprise from the single dimensional graphs with the motivation to provide for multiple views of the data to the user for easier comprehension of the data presented.

In regards to claim 52, Rebane and Rowe teach all the limitations of claim 31. They do not teach a graphical user wherein, when a portion of data displayed in one of the at least two single dimensional views and the displayed one of the at least one multiple dimensional view displayed in the data visualization portion is selected and

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other data is deselected, data in the other ones of the at least two single dimensional views and the displayed one of the at least one multiple dimensional view displayed in the data visualization portion corresponding to the selected data is selected, and any other displayed data in the other ones of the at least two single dimensional views and the displayed one of the at least one multiple dimensional view displayed in the data visualization portion is deselected. Official notice is given that it is well known in the art to have a GUI wherein when data is selected the current data that is on the screen is deselected. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe and include a method of deselecting data when other data is selected with the motivation to enable the user to fit all the necessary data on to the screen.

In regards to claim 54, Rebane and Rowe teach all the limitations of claim 52. They do not teach a graphical user interface wherein the selected data is displayed in color and the deselected data is not displayed. Official notice is given that it is well known in the art to show selected data in color and not have the deselected displayed. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe and include a GUI that shows selected data in color and does not show deselected data with the motivation to provide for clear display of the data.

In regards to claim 69, Rebane and Rowe teach all the limitations of claim 56. They do not teach a method wherein generating and displaying the plurality of data visualization views comprises generating and displaying at least two single dimensional

views and at least one multiple dimensional view. Barg teaches teach a graphical user interface, wherein the data visualization portion comprises, as the plurality of data visualization views, at least two single dimensional views and at least one multiple dimensional view (Figure 10, there are several graphs that are two dimensional and an example of a multidimensional graph). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe with the teachings of Barg and include a two dimensional and at least one multiple dimensional graph with the motivation to provide the user with an convenient way to represent the data so it easy to comprehend.

Claim 79 is in the same context as claim 15; therefore it is rejected under similar rationale.

In regards to claim 81, Rebane, Rowe and Barg teach all the limitations of claim 79. Rebane and Rowe do not teach a method wherein generating and displaying at least one of the multiscape view, the textual data view and the multiple dimensions view comprises selectively generating each of the multiscape view, the textual data view and the multiple dimensions view based on the selected workflow control entry. However, Rebane teaches a multidimensional view comprising of a textual data view (Figure 6a). Rowe teaches, "different chapter headings can be displayed as labels in bookmark 45 so that when the user selects a chapter, the first page of that chapter is displayed in view window 39." (Column 8, Line 56). Barg teaches, "In the exemplary embodiment of the single measure perspective, which uses a three-dimensional multiscape view, the dimensions of the cube, or pivot table, are used as the X and Y axes for the three-

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dimensional multiscape view.” (Column 6, Line 28). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane with the teachings of Barg and include textual data view with multiscape view and the multiple dimension view with the motivation make the data easier to comprehend. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Barg with the teachings of Rowe and include a menuing system so when an item is selected, it is displayed on the right side of the screen with the motivation to enable the user to access data in a facile manner.

Claim 82 is in the same context as claim 40; therefore it is rejected under similar rationale.

Claim 97 is in the same context as claim 52; therefore it is rejected under similar rationale.

Claim 99 is in the same context as claim 54; therefore it is rejected under similar rationale.

Claim 162 is in the same context as claim 56; therefore it is rejected under similar rationale.

Claims 100 and 131 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rebane (US 6662192) in view of Rowe et al. (US 5781758) in further view of Lacheze et al. (US 5956698).

In regards to claim, Rebane and Rowe teach a report selection control [menuing system] having a plurality of report selection control entries, each report selection

control entry associated with a predetermined set of at least one dimension of the plurality of dimensions of the conditioned data and at least one measure of the plurality of measures of the conditioned data; and they further teach when a report selection entry is selected for generation of a corresponding report, the report generation manager accesses a portion of the conditioned data based on the predetermined set associated with the selected report selection (i.e. "different chapter headings can be displayed as labels in bookmark 45 so that when the user selects a chapter, the first page of that chapter is displayed in view window 39." (Rowe, Column 8, Line 56)). They do not teach generating one of the at least one different type of reports, each generated report generated based on at least a subset of the accessed portion of the conditioned data; and a display manager capable of displaying, on a display device, the report selection control; and a report generation manager capable of generating at least one different type of report. Lacheze teaches, "At steps 432 and 434, the system develops the report filter based on perceived customer requirements and then generates the report using such filter. As can be appreciated, the filter is used to "pull" required information from the above-mentioned database associated with the mass memory 332 (FIG. 2)" Column 12, Line 58). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rebane and Rowe with the teachings of Lacheze and provide a way of generating reports with the motivation to provide the user an easy way to make sense of the data in the database.

Claim 131 is in the same context as claim 100; therefore it is rejected under similar rationale.

Allowable Subject Matter

Claims 16 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 16 and 39 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior art does not show a conditioned data visualizing system wherein each workflow control entry [menu item] is further associated with a predetermined set of enabled ones of the at least two single dimensional views, the multiscape view, the textual data view and the multiple dimensions view.

Claim 39 is in the same context as claim 16; therefore it is allowed under similar rationale.

Claims 17 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 17 and 32 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior art does not show a conditioned data visualizing system, wherein the predetermined set of at least one dimension and at least one measure comprises a first

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subset of at least one dimension associated with a first one of the at least two single dimensional views, a second subset of at least one dimension associated with a second one of the at least two single dimensional views.

Claim 32 is in the same context as claim 17; therefore it is allowed under similar rationale.

Claims 18, 34, and 73 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 18, 34, and 73 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior art does not show a conditioned data visualizing system, wherein the predetermined set of at least one dimension and at least one measure comprises a subset of at least one measure, the subset of at least one measure associated with each of the at least two single dimensional views and the at least one multiple dimensional views.

Claim 34 is in the same context as claim 18; therefore it is allowed under similar rationale.

Claim 73 is in the same context as claim 18; therefore it is allowed under similar rationale.

Claim 33 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 33 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior art does not teach a graphical user interface, wherein each single dimensional view comprises a list box, the list box comprising the dimensions of the subset of at least one dimension associated with that single dimensional view, such that, when a dimension of the list box is selected, data corresponding to that dimension is displayed in that single dimensional view and at least the multiscape view of the at least one multiple dimensional view.

Claim 35 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 35 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior art does not teach a graphical user interface further comprising a measures list box, the measures list box comprising the measures of the subset of at least one measure associated with the selected workflow control entry, such that, when a

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measure of the measures list box is selected, data corresponding to that measure is displayed in the at least two single dimensional views and at least the multiscape view of the at least one multiple dimensional view.

Claim 48 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art does not teach a graphical user interface wherein: the multiple dimensional view comprises a plurality of columns, each column associated with one of the at least one dimension associated with the selected workflow control entry; each column displays at least one of textual and numerical data for the associated dimension; at least some of the columns displaying numerical data display a relative value for each value of the numerical data; and at least some of the columns has a column header having a sorting icon, such that, when the sorting icon is selected, the dimension associated with that column becomes a primary sort dimension.

Claim 74 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art does not teach a method wherein generating and displaying the plurality of data visualization views comprises generating and displaying a list box based on the subset of at least one measure associated with the selected workflow control entry.

Claim 75 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 75 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior art does not teach a method further comprising, in response to a selection of a measure of the list box, displaying data corresponding to the selected measure in the at least two single dimensional views and at least a multiscape view of the at least one multiple dimensional view.

Claims 76, 77, and 78 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 76, 77, and 78 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior art does not teach a method wherein the predetermined set of at least one dimension and at least one measure comprises a subset of at least two dimensions, each dimension of the subset associated with at least one of the at least two single dimensional views.

Claim 91 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art does not teach a method wherein generating the multiple dimensional view comprises: generating a plurality of columns, at least some of the columns having a column header having a sorting icon; associating each column with one of the at least one dimension associated with the selected workflow control entry, each column displaying at least one of textual and numerical data for the associated dimension.

Response to Arguments

Applicant's election with traverse of Group 1 in the response dated June 02, 2004 is acknowledged. The traversal is on the ground(s) that the two inventions are similar enough where a one search would encompass both invention and hence would not be deemed a burden on the Examiner. This is not found persuasive because the applicant did not refute the Examiner's view that the two inventions are subcombinations usable together, the applicant merely states that the inventions are "sufficiently related". However the MPEP states,

Where the related inventions as claimed are shown to be distinct under the criteria of MPEP § 806.05(c) - § 806.05(i), the examiner, in order to establish reasons for insisting upon restriction, must show by appropriate explanation one of the following:

(A) Separate classification thereof : This shows that each distinct subject has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search. Patents need not be cited to show separate classification.

(B) A separate status in the art when they are classifiable together :

Even though they are classified together, each subject can be shown to have formed a separate subject for inventive effort when an explanation indicates a recognition of separate inventive effort by inventors. Separate status in the art may be shown by citing patents which are evidence of such separate status, and also of a separate field of search.

(C) A different field of search : Where it is necessary to search for one of the distinct subjects in places where no pertinent art to the other subject exists, a different field of search is shown, even though the two are classified together. The indicated different field of search must in fact be pertinent to the type of subject matter covered by the claims. Patents need not be cited to show different fields of search.

In the previous restriction the Examiner showed that the two inventions were distinct, and met two of the requirements (A and C) needed in order to establish reasons for insisting upon restriction; therefore,
The requirement is still deemed proper and is therefore made FINAL.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6188403

Sacerdoti et al.

Teaches a user friendly graphics generator using direct manipulation.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (703) 305-8774. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (703) 308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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